(8-2012)

### **Article 5: Building Regulations**

### Division 18: Additions and Modifications to Chapter 18 of the 2010 California Building Code

("Additions and Modifications to Chapter 18 of the 2007 California Building Code" added 4-8-2008 by O-19726 N.S.) (Retitled to "Additions and Modifications to Chapter 18 of the 2010 California Building Code" and amended 7-31-2012 by O-20187 N.S.)

# §145.1801 Local Modifications and Additions to Chapter 18 "Soils and Foundations" of the 2010 California Building Code

- (a) Chapter 18 of the 2010 California Building Code is adopted by reference with additions and modifications pursuant to Sections 145.0105 and 145.0106 of the Land Development Code.
- (b) Section 1803 is adopted by reference with modifications and additions pursuant to Sections 145.0105 and 145.0106 of the Land Development Code.
- (c) Section 1801, Section 1802, and Sections 1804 through 1810 are adopted by reference without change pursuant to Section 145.0103 of the Land Development Code.

(Added 4-8-2008 by O-19726 N.S; effective 5-8-2008.) (Retitled to "Local Modifications and Additions to Chapter 18 "Soils and Foundations" of the 2010 California Building Code" and amended 7-31-2012 by O-20187 N.S.; effective 8-30-2012.)

## §145.1803 Local Additions and Modifications to Section 1803 "Geotechnical Investigations" of the 2010 California Building Code

- (a) Section 1803.2 is adopted with additions and modifications pursuant to Sections 145.0105 and 145.0106 of the Land Development Code.
  - (1) 1803.2.1. A geotechnical investigation shall be conducted when required by Section 1803.2 of the California Building Code, Section 145.1803 (d) of the San Diego Municipal Code, or the Building Official for all new structures, additions to existing structures not exempted by San Diego Municipal Code Section 145.1803(b), or whenever the occupancy classification of a building changes to a higher relative hazard category pursuant to Table 1604.5 of the California Building Code as a result of the proposed work.

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- (2) 1803.2.2. When required, a geotechnical report shall be submitted to the Building Official. When geologic hazards are identified, the report shall contain appropriate recommendations for mitigation of the hazards, and these recommendations shall be incorporated into the design of the project before issuance of a Building Permit. No Building Permit shall be issued for construction where the geotechnical investigation report establishes that construction of buildings or *structures* would be unsafe because of the geologic hazards. Issuance of a Building Permit does not constitute a representation by the City that the site does not contain geological hazards or that construction is safe.
- (3) 1803.2.3. The Building Official may require that a "NOTICE OF GEOLOGIC AND GEOTECHNICAL CONDITIONS" be executed by the property owner as a condition to the issuance of a Building Permit for any structure to be located over a suspected fault or other geologic hazard. A "NOTICE OF GEOLOGIC AND GEOTECHNICAL CONDITIONS" may also be required when a geologic investigation cannot conclusively establish that buildings or *structures* located on the site would either be safe or unsafe. The form of the "NOTICE OF GEOLOGIC AND GEOTECHNICAL CONDITIONS" shall be as provided by the Building Official. When required by the Building Official, the "NOTICE OF GEOLOGIC AND GEOTECHNICAL CONDITIONS" shall be executed by the property owner and recorded with the San Diego County Recorder, and filed with the City of San Diego.
- (b) Section 1803.2 is modified and exceptions are added pursuant to Sections 145.0105 and 145.0106 of the San Diego Municipal Code.
  - (1) The Building Official may waive the requirement for a geotechnical investigation where satisfactory data from adjacent areas is available that demonstrates an investigation is not necessary for any of the conditions in California Building Code Sections 1803.5.1 through 1803.5.6 and Sections 1803.5.10 and 1803.5.11.
  - (2) The Building Official may waive the requirement for a geotechnical investigation for additions to detached one and two-family dwellings, except when the site is located within Geologic Hazard Category 11 or 21 in Table 145.1803 of the San Diego Municipal Code, or when required by a discretionary review.
  - (3) The Building Official may waive the requirement for a geotechnical investigation for additions where the total floor area of all additions to the same *structure* is less than 500 square feet of floor area in any 12-month period.

- (4) The Building Official may waive the requirement for a geotechnical investigation for remodels and non-structural tenant improvements to existing structures.
- (5) The Building Official may waive the requirement for a geotechnical investigation for *structures* assigned to occupancy Group U or any other structure of a similar nature.
- Section 1803.5 is modified pursuant to Section 145.0106 of the San Diego (c) Municipal Code. 1803.5 (Investigated conditions) Geotechnical investigations shall be conducted as indicated in California Building Code Sections 1803.5.1 through 1803.5.13.
- (d) Section 1803.5.11 is modified by adding Subsections 1803.5.11.1 and 1803.5.11.2 pursuant to Section 145.0106 of the San Diego Municipal Code.
  - (1) 1803.5.11.1. A geotechnical investigation report shall be submitted pursuant to San Diego Municipal Code Sections 145.1803(d), 145.1803(f) and Table 145.1803 unless exempted pursuant to San Diego Municipal Code Section 145.1803(b).
  - (2) 1803.5.11.2. For structures regulated by the California Residential Code, Section 145.1803(d) shall apply.
- (e) Section 1803.5.12 is modified pursuant to Section 145.0105 of the San Diego Municipal Code. 1803.5.12. (Seismic Design Categories D through F) For structures assigned to Seismic Design Category D, E or F in accordance with Section 1613, the geotechnical investigation report required by Section 1803.5.11, shall also include the determination of lateral earth pressures on foundation walls, and retaining walls supporting more than 6 ft of backfill height, due to earthquake motions.
- (f) Section 1803.5.13 is added pursuant to Section 145.0105 of the San Diego Municipal Code. 1803.5.13. Local Geologic Hazards. A geotechnical investigation report shall be submitted when required by Municipal Code Section 145.1803 and Table 145.1803. Notwithstanding Table 145.1803, the Building Official may require a geotechnical investigation report for any site if the Building Official has reason to believe that a geologic hazard may exist at the site based on data not mapped on the City of San Diego Seismic Safety Study maps.
- The Geologic Hazard Category and the Building, Structure and Facility Class (g) must be determined as follows when using Table 145.1803 to determine whether a geotechnical investigation report is required due to local geological hazards within the City of San Diego. Ch. Art. Div.

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- (1) The Hazard Category describes the geologic feature or condition suspected at the site. The Hazard Category is determined by reference to the current City of San Diego Seismic Safety Study maps.
- (2) City staff shall assign one of four Building, Structure and Facility classes to each building, *structure*, or facility based on their use, type of occupancy, number of occupants, and whether hazardous materials are being used or stored in the building, *structure*, or facility to determine whether a Geotechnical Investigation Report is required.
  - (A) Class A includes the following:
    - (i) Buildings or *structures* classified as Essential Facilities in Occupancy Category IV as defined in Table 1604.5 of the 2010 California Building Code.
    - (ii) Any building, *structure* or facility where significant generation or storage of toxic, hazardous, or flammable materials will occur.
  - (B) Class B includes the following *developments*, occupancy groups, and *structures* provided they are not included in Class A:
    - (i) All *developments* consisting of four or more buildings on the same lot.
    - (ii) All new *structures* requiring deep foundations, such as piers or pilings.
    - (iii) All *structures* over three stories in height.
    - (iv) All *structures* containing the following occupancies pursuant to the 2010 California Building Code, Chapter 3:
      - a. Group A, Divisions 1, 2, 3 and 4;
      - b. Group E, buildings and other *structures* containing elementary school, secondary school or day care facilities with an occupant load greater than 250;
      - c. Group H, Divisions 1, 2, and 3; and
      - d. Group I, Divisions 2 and 3.

- All structures with an occupant load of more than 300 (v) occupants as determined by Table 10-A of the 2010 California Building Code and structures used for public assembly assigned to Occupancy Category III in Table 1604.5 of the 2010 California Building Code.
- (vi) Tanks, bins, hoppers, silos, and other storage structures with more than 20,000 gallon capacity intended to store toxic, hazardous, or flammable contents that are not associated with a building, structure, or facility in Class A.
- (vii) Tanks, bins, hoppers, silos, and other storage structures over 35 feet high.
- Towers over 35 feet high. (viii)
- (ix) Retaining walls over the heights listed in the following Subsections a. and b. with the height measured from the top of the footing to the top of the wall:
  - Retaining walls over 12 feet in height; and a.
  - b. Retaining walls over 8 feet in height supporting a surcharge or retaining toxic, hazardous, or flammable contents.
- (C) Class C includes the following occupancy groups and structures provided they are not included in Classes A or B:
  - (i) All *structures* containing the following occupancies pursuant to the 2010 California Building Code, Chapter 3:
    - Group A, Divisions 2, 3 and 5 with rooms a. having less than 300 occupants;
    - b. Group B;
    - Group E, buildings and other *structures* c. containing elementary school, secondary school or day care facilities with an occupant load less than 250;
    - d. Group F, Divisions 1 and 2;
    - Group H, Divisions 4 and 5; e.
    - f. Group I, Division 1;

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- g. Group M;
- h. Group R, Divisions 1 and 2; and
- i. Group S, Division 1.
- (ii) Retaining walls over the heights listed in the following Subsections a. and b. with the height measured from the top of the footing to the top of the wall:
  - a. Retaining walls over 6 feet in height; and
  - b. Retaining walls of 8 feet or less supporting a surcharge or retaining toxic, hazardous, or flammable contents.
- (iii) Tanks, bins, hoppers, silos, and other storage structures intended to store toxic, hazardous, or flammable contents;
- (iv) Tanks, bins, hoppers, silos, and other storage structures over 20 feet high; and
- (v) Towers over 20 feet high.
- (D) Class D includes the following occupancy groups and *structures* provided they are not included in Classes A, B, or C: All *structures* containing the following occupancies pursuant to the 2010 California Building Code, Chapter 3: Group R, Divisions 3 and 4 and buildings regulated by the 2010 California Residential Code.
- (h) Section 1803.6 is adopted with modifications and additions pursuant to Sections 145.0105 and 145.0106 of the San Diego Municipal Code. 1803.6.1. Geotechnical investigations reports prepared pursuant to Section 1803.6 of the 2010 California Building Code and Section 145.1803 (f) of the San Diego Municipal Code shall be required for sites where geologic hazards may exist as determined by the Building Official prior to obtaining a Building Permit. The report shall include all requirements as established by the Building Official. All reports shall be prepared in accordance with the most recent edition of the City of San Diego "Guidelines for Geotechnical Reports," which is available through the City of San Diego Official Website. These minimum requirements shall be augmented by geologic evaluations pertinent to the type of proposed project and anticipated method of construction, which should be described in the report. For buildings located in both a fault zone and a hazard category zone, the most restrictive requirement shall govern.

Table 145.1803 <sup>(1)</sup> Required Geotechnical Investigation		
Fault Zones/Ground Rupture	11, 12, 13	A, B, C, D
Landslides/Potential Slope Instability	21 through 27	A, B, C, D
Liquefaction/Potential Ground Failure	31, 32	A, B, C, D
Coastal Bluff Stability	41 through 48	A, B, C, D
Variable Stability/Unfavorable Geologic Structure with Sloping Topography	53, 54 (with slope greater than or equal to 4:1 or 25%)	A, B, C, D
	53, 54 (with slope less than 4:1 or 25%)	A, B, C
All Other Conditions	51, 52, 55	A, B, C

### Footnotes:

(1) See San Diego Municipal Code Section 145.1803 (f) and (g).

("Local Additions and Modifications to Section 1803 "Geotechnical Investigations" of the 2010 California Building Code" added 7-31-2012 by O-20187 N.S.; effective 8-30-2012.)